

The Texas Beekeepers Association



Journal



Jul / Aug 2014

www.texasbeekeepers.org

Issue 14-4



Dadant

Attractive Honey Containers Make the Sale Queenline Glass Honey Jars

Muth Jars



M00223
One pound jar
Carton of 12
Ship wt. 14 lbs.
\$17.50

Only
available
from
Hamilton, IL
location.

Check out our catalog for other
types and sizes of quality
honey containers!

Hex Jars

M01550 5.5 oz. Cartons of 12
Ship Wt. 5 lbs. \$8.95
M01551 9.5 oz. Cartons of 12
Ship Wt. 8 lbs. \$12.75
M01552 13.5 oz. Cartons of 12
Ship Wt. 9 lbs. \$13.50



Size of Jar Honey Capacity	Number of Jars Per Carton	Lid* Style (see below)	Order Number	Ship Weight Per Carton lbs.	Price Per Carton 1-99 Cartons
8 ounces	24	1 (48 mm)	M001952	10	\$15.62
1 pound	12	1 (58 mm)	M001962	8	\$9.63
1 pound	24	1 (58 mm)	M001972	14	\$18.06
2 pound	12	1 (63 mm)	M001982	12	\$12.82
4 pound	6	(G70)	M001992	10	\$12.50

Lid Style White plastic (glass not shipped by UPS)
*We reserve the right to substitute lids should the style you requested not be available.

M00258

2 oz. Clear Bear
with caps c/50
Ship Wt. 3lbs.
\$20.95



Honey Bears



M00255

M00255 12 oz. Regular Bears
with Cap and Collar (38mm) Cartons of 12
Case of 12 Ship Wt. 3 lbs. \$7.50
M00255CPN 12 oz. Clear Bears
with Cap and Collar (38mm) Cartons of 12
Case of 12 Ship Wt. 3 lbs. \$8.95
M00256 Bulk Pack - 250 per case
1-4 Cases 250 per case .. \$95.95 per case
5 & Up Cases. \$93.95 per case
Ship wt. 52 lbs. per case

M00256CPN 12 oz. Clear Panel Bears
with Cap and Collar (38mm)
1-4 Cases \$114.50 per case
5 & Up Cases. \$108.95 per case
Ship wt. 52 lbs. per case

* 8 oz. and 2 lb. bears are also available.

3 lb. Glass Round Jars (Quarts)

Carton of 12 with
white plastic lids
M001932
1-99 \$14.20
per Carton
(All Ship Wts. 12 lbs.
per carton.)

Classic Plastic Honey Jars

with 38mm Snap Caps

Jar Size	No. of Jars Per Ctn.	Item Number	Ship Wt. Per Ctn. lbs.	Price Per Ctn. 1-99 Cartons
8 oz.	24	M01150	2	\$13.10
1 pound	24	M01151	3	15.42
1½ pound	24	M01152	4	18.40
2 pound	12	M01153	2	12.15

Please specify red or yellow snap caps.
If none specified yellow will be sent.

Call for Pricing on 100+ Cartons • All prices are FOB, Hamilton, IL
Note: Plastic containers may ship at individual weights listed not combined weights.
All prices are subject to change.

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President's Report

from Blake Shook



Welcome to Farming

If I could title this year's honey crop in Texas, I believe it would be "Welcome to Farming". My honey production, along with many others, was very sporadic. Many areas were very dry this spring, and halfway through the honey flow, it began to rain. While the rain did help extend the flow, it also prevented the bees from foraging on several peak flow days. In some bee yards I averaged 130+lbs per hive. In other areas I was lucky I didn't have to feed them. Though overall, the bees look fantastic. In good areas, they brought in up to 10lbs of honey per day. With all our bees through, they never cease to amaze me with their resilience. Many years we will send our bees up to 5 different areas each year, and yet, with proper care, they still perform amazingly well.

I am hoping for a good fall crop, and that the bees are in good shape for almond pollination next year. In commercial beekeeping, you are always thinking 6 months ahead of where you currently are. Once the bees are on a honey flow, there isn't much

else to think about or plan...time to get ready for the next event. Now that my bees are all up north producing honey, I'm busy planning for winter management and almonds next year.

As you will see in the month's journal, we are nearing our annual convention! Every year we are working to improve our convention to be more informative, educational, and relevant to all scales of beekeepers. If you have a speaker suggestion, or topic suggestions, let us know! While TBA is working hard to have one of the best programs and conventions in the US, we are also developing many programs and member benefits outside of our convention. If you haven't been to our new website, check it out! Sign up for the "Texas Honey Locator" if you want to sell more honey, or the "Swarm Removal Locator" if you want the public to know you will remove swarms.

See all of you in November!

***Look for Details of the 2014 Texas Beekeepers Annual Convention
on Pages 5 - 12. We have a great line-up of Speakers from 1pm Friday
through Lunchtime on Sunday at the Crowne Plaza - Reliant in Houston.
Make this our Most Successful Annual Event Ever!***

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Cover Picture: Bee on Honey from Ginnie Jeske

Vice President's Report

from Chris Moore



Who is Right ??? Who is Honest ???

I'm sure most of you have heard me or someone else in beekeeping say.... Ask ten beekeepers the same question and you will get fifteen different answers. For example...

Most of us enjoy the product our bees produce, that sweet sticky dried nectar product that we steal from the hive, extract and sell. But how we process that product varies greatly. Yes, most of us use centrifugal force via an extractor to remove the honey from the frames of honeycomb or squeeze natural comb, but after that, then what? How do you remove the wax? How do you keep the honey from crystallizing? How do you make your honey nice & clear?

That's where things go in all kinds of directions. Some strain their honey using anything from #8 hardware cloth to panty hose (hopefully clean). Some heat and filter their honey using anything from a sock filter to Diatomaceous earth filter presses. Some just use a spoon to remove any wax, bees or wood that naturally float to the top of the honey.

Some do not heat their honey at all. Some heat their honey to 200 degrees.

So, **who is right?** The end result of each process is good honey. Although the more the honey is processed, the fewer beneficial ingredients survive. So how should I process my honey?

I believe whatever your process, you need to be honest with the consumer. It's unfortunate our industry is inundated with deceptive marketing. Consumers want **fresh, local, and raw** honey and are willing to pay good money for such a product. The problem is there are several brands that claim to be "**raw & unfiltered**", but the honey is heated and pumped through a filter. So how can they get away with such deception? It's mostly because there is not an industry definition for **raw or unfiltered**. So these companies just decide to interpret that it's ok to heat their honey and call it "**raw**" and/or run it through a filter and call it "**unfiltered**". So... **Who is Honest ?**

So what can we do? TBA has implemented the Texas Honey Locator. <http://texasbeekeepers.org/honey-locator/>.

First, TBA has defined honey terms, which members must agree to comply with.

Second, the locator map will allow consumers to find you, a local beekeeper.

It's a **win-win** for everyone. The consumer gets honey directly from a real beekeeper, and the beekeeper will be able to sell their local honey at a good price.

Please sign up... Consumers are looking for you.

TBA Honey Definitions

Honey - A sweet substance produced by Honey Bees strictly from plant nectar.

Raw - Honey only slightly warmed to reliquefy for packaging. Not to exceed 120 degrees, which is the maximum temperature inside a beehive.

Unfiltered - Some course straining can be used to remove large particles, but not the extent that it removes nutrients. NO sock filters, plate filters, sand filters, or diatomaceous earth filters.

Pure- 100% Honey, with no additives.

Natural- 100% Honey, with no additives.

Local- Honey that is produced and consumed in the same geographical area. Please see the Texas Honey Locator to find local honey in your area.

Producer- A beekeeper who produces 100% of his own honey

Producer/Packer -A beekeeper who produces 100% of his own packaged product

Packer/Producer - An individual who produces 30% or more of his packaged product

Packer - An individual that buys in bulk and repackages for the consumer

Marketing Co. - A company that buys packaged honey, and resells it

To be included in the TBA Honey Locator, you must be a member of TBA. Please go to the new website www.texasbeekeepers.org/honey-locator/ and complete the application.

Director's Report *from Rodney Holloway*

Central Texas, Fort Bend, Harris County, Houston



About the only thing you can predict about Texas weather is no two years are going to be the same. As I write this in July of 2014 I am continually surprised at our current abundance of moisture. It looked like 2014 was going to follow the familiar dry pattern of recent times but late spring and early summer have been hardly dry. The bees are excellent. Good production coupled with the best prices in years can't do anything but help a struggling beekeeping industry. Those of you who were keeping bees in the 80s remember those wetter years. Maybe better times are ahead.

I have rediscovered package bees – having not bought packages in 10-15 years. This was probably on the belief that this method of acquiring bees or increasing colony numbers was too expensive. Packages are I guess somewhat pricey, but this year

and last I bit the bullet, bought, and feel like it has been money well spent. This year each package has developed into a productive colony and averaged one super of honey so far. One month after installing the packages, we removed two frames with associated bees from each and placed these in a three frame nuc with a new queen. By the first of July each split had been moved to a five frame nuc then a ten frame box. These “second” colonies are now full strength with some surplus honey. Aside from the blessing of good weather this system has worked in part because each package and nuc was each given all of the drawn comb it could use.

Now the real task begins..getting the colonies through the winter and ready to produce next spring.

Texas Beekeepers Association Annual Convention 6th - 9th November 2014

**Crowne Plaza - Reliant Hotel
8686 Kirby Drive, Houston, TX 77054
(713) 748-3221 Crowne Plaza - Reliant Hotel
Online booking at**

https://resweb.passkey.com/Resweb.do?mode=welcome_gi_new&groupID=29890141

**Room Rate \$95
Call before Monday October 27th**

Conference from 1pm Friday 7th through Noon on Sunday 9th

**Dr. Larry Connor - all day Thursday
Kids Learning About Bees (KLAB) - Friday morning**



**Texas Beekeepers Association
Annual Convention
6th - 9th November 2014**

**Crowne Plaza - Reliant Hotel
8686 Kirby Drive, Houston, TX 77054
(800) 439-4745 Crowne Plaza - Reliant Hotel**

The Annual Convention this year features:



General Sessions Friday afternoon and Saturday afternoon

Many more Breakout sessions Saturday and Sunday morning

Practical Backyard Beekeeping with Dr. Larry Connor on Thursday

Speakers

<i>Blake Shook</i>	-	<i>President TBA</i>
<i>Jeff Pettis</i>	-	<i>Research leader at Beltsville Bee Laboratory</i>
<i>Dr. Larry Connor</i>	-	<i>Wicwas Press</i>
<i>Lance Wilson</i>	-	<i>Certified Master Beekeeper</i>
<i>Dr. Juliana Rangel</i>	-	<i>Assistant Professor of Apiculture, Texas A&M University</i>
<i>Mark Dykes</i>	-	<i>Chief Apiary Inspector, Texas Apiary Inspection Service</i>
<i>Liana Teigen</i>	-	<i>Bee Informed partnership</i>
<i>Michele Colopy</i>	-	<i>Pollinator Stewardship Council</i>
<i>Greg Hannaford</i>	-	<i>Ozark Bee Supply</i>

and

*Chris Moore, Clint Walker, Dean Cooke, Becky Bender,
Chris Doggett, Zane Baird, Hayden Wolf, Shelby Kilpatrick.*



Please
note that the
TBA Convention begins
this year at 1pm Friday and
continues until lunchtime on
Sunday. We hope this allows
for more of our members to
take part in the whole event.
Looking forward to
seeing you there.

In addition to the convention there
will be two events which run in
conjunction with the conference.

Practical Backyard Beekeeping with
Dr. Larry Connor all day Thursday
- see below for details.

Kids Learning About Bees (KLAB)
on Friday morning
- see page 8 for details

Practical Back-Yard Beekeeping

For Small-Scale (Hobby) and Serious Sideline Beekeepers

DR. LARRY CONNOR, INSTRUCTOR

REGISTRATION \$75 PER PERSON, Includes \$25 credit toward a Wicwas Press book
Or \$125 per couple (only one book credit)

PROGRAM

9:00 REGISTRATION

9:15 Setting up and Operating Two hives and a Nucleus: Lessons with Limited Colony Resources

10:30 BREAK

11:00 Selling Bees & Value Added Beekeeping: Reverse Your Cash Flow and Making Money Keeping
a Few Bee Colonies

12:15 LUNCH BREAK

1:30 Basic and Not-so Basic Management Techniques For Successful Beekeeping

2:45 BREAK

3:15 Queen Management: Cell production, 48-hour queen cells, ripe queen cells, virgin use, mating queens,
queen banks and more

4:30 Wrap-up and evaluations



KIDS LEARNING ABOUT BEES



Hosted by:

Texas Beekeepers Association

www.texasbeekeepers.org

Friday, November 7, 2014

10 AM- 2 PM

Crowne Plaza - Reliant Hotel

8686 Kirby Drive,

Houston, Texas 77054

This free event is open to school children of all ages, accompanied by an adult, during the Texas Beekeepers Association annual convention.

Educational stations will be manned by students and experienced beekeepers.

Meet Buzzy Bear and Honey Queens and Princesses from Texas who will escort groups through the 30-45 minute tour of the educational stations which will include:

- **An observation hive of honey bees**
- **Bee suit, hat, veil, gloves**
- **Honey extracting equipment**
- **Bee hive box, smoker, and tools**
- **Pollination Display**
- **Informative Posters**
- **Handouts**
- **Bee related items and honey for purchase**
- **Honey Queen display tables**
- **Meet Buzzy Bear**

Contact Caryl Adams to register

Cell (972) 423-0463 Email *downthyme@msn.com*

For your time slot, please email your name, number in your party, and a contact phone number to *downthyme@msn.com*

Logging on to the new Website

Some members have had difficulty in logging on to the new website. For those of you whose membership was entered on to the website by us, your username is the email address we have for you. The bottom right hand side of the website home page is the place to log in. Enter your username and, if this is the first time you have accessed the website, click on "forgot password." This will allow you to create your unique password. We can only change your username by deleting the whole record and re-entering your information, so please try to live with the username as it is now.

If you have joined us on the website, or renewed membership on the website, then there should be no problem logging in.

It is important to us that this all works smoothly, as conference registration and membership renewal is now handled on the website.

If you still encounter problems, please email our new Membership Coordinator, Shirley Doggett, at *sdoggett@mindspring.com*. In addition, please check your membership details as we have them on the website and let us know if we have any wrong information - we need your help as we transition to the information age.

2014 Annual TBA Convention Honey and Photography Rules

from Mark Hedley

The Texas Beekeepers Association will conduct the honey and photo contest during the Annual Convention in Houston on November 7 - 9. Judging will take place beginning Saturday morning with results presented on Saturday afternoon before the start of the Business Meeting. Our thanks go out to the participants for their hard work with the finest entries in Texas.

General Entry Requirements:

1. You may register and pay by credit card or PayPal on-line at texasbeekeepers.org while registering for the convention. Bring your Honey and Photo contest entry ticket(s) with your entry/entries to the registration table. Alternatively, remove (or print) the newsletter entry form below if you do not have Internet access. We accept photocopies.
2. When registering on-line, purchase one ticket per entry in the honey or photo contest. Alternatively, use one manual form for each contest entry. Only one entry per category allowed per contestant.
3. Remove identifying label or markers from entry, with the exception of the two additional containers required for a "Black Jar" entry (See Black Jar Entry Requirements)
4. Contest administrators will affix coded tabs to entries upon submission.
5. Entry deadline: At the convention contest headquarters, 1:00 pm Friday, November 7, 2014. Contest Entry Fees: Honey \$5.00 per entry, Photo \$3.00 per entry.
6. Disposition of Entries: Winning entries will be retained by the Texas Beekeepers Association and sold during our fund-raising event. Owners of non-winning entries may donate their entries to the fundraiser, or retain them at the end of the competition.

Polished Honey Entry Requirements:

1. Submit extracted honey entries in one-pound Queenline glass jars.
2. Contestants may only submit honey entries produced in their own apiary or by bees that they manage in a different state for honey production or pollination (see also Black Jar – Non Local Category).
3. If donating entries to the Fund Raising Auction, submit any labels and floral source information desired in a separate envelope for attachment at contest conclusion.

"Black Jar" Honey Entry Requirements:

1. Entries must be submitted by a beekeeper and be pure unadulterated honey produced by his or her own bees.
2. An "Entry" consists of three (3) containers of any style (8 ounces or more) of the same honey.
3. Submit one of the three entry samples in a container without any identifying marks; while the other two must have the beekeeper's label attached as he or she would when offering their honey for sale. None of the three entries will be returned. The labeled containers will be sold as a fund-raiser for the Texas Beekeepers Association while promoting the individual beekeeper or apiary.

Photo Entry Requirements:

1. TBA may retain digital copies of entries for permanent TBA archives. Photographer submitting an entry retains all legal copyrights. Contest administrators will return all entries at the convention upon completion of archiving process. The first place photo entry will be featured on a 2015 TBA Journal cover.
2. Judges will evaluate all entries in a class, regardless of black and white, color, or slide format. Photographers may submit any size entry with a maximum size of 8"x10".
3. Entries in "Our Glorious Honey Bee" should depict honey bees in their natural environment depicting some element of honey bee behavior, science, or history or any aspect of beekeeping that contains a honey bee in the photo.
4. Photographers may only submit photos taken personally.

Contest Judging – General

1. Contest judges will evaluate and score entries on Saturday, November 8, 2014.
2. Contest Committee Chairman will announce awards Saturday, November 8, at 3:00pm.

2014 Annual Convention Honey and Photography Contest Rules (contd.) *from Mark Hedley*

HONEY JUDGING CRITERIA

Contest Judging – Polished Honey – Judges may award points to entries in the following categories for a possible 100 points:

Polished Honey	
Container Appearance	10
Level of Fill	10
Free of Foreign Matter	10
Brightness	10
Free of Air Bubbles and Foam	20
Flavor	40
Total Points	100

Contest Judging – “Black Jar” – Judges will award First, Second, and Third place to entries in categories based on blind tastings. Judges will not see the color, clarity, or any visual appeal of the honey. It is a contest based on flavor profile and taste alone. A panel of judges will taste test and score the honey entries individually, awarding points to each entry. Total Points determine placement.

Best Local Blend	(example blend: wildflower, mesquite, native brush, tallow, etc)
Best Local Varietal	(example at least 45% from one source: tallow, cotton, native brush, wildflower, etc)
Best Non-Local Blend	(example: Clover, Canola, Orange, Sourwood, etc blends)
Best Non-Local Varietal	(example: at least 45% from one source: Clover, Canola, Orange, Sourwood, etc.)
Exotic	(It still has to come from your own bees, and really be honey)

PHOTOGRAPHY JUDGING CRITERIA

Contest Judging – Photography – Our Glorious Honey Bee - Judges may award points to entries in the following categories for a possible 100 points:

Photography – Our Glorious Honey Bee	
Relevancy to Topic	25
Composition / Arrangement	15
Focus / Sharpness	20
Lighting	15
Creativity	25
Total Points	100

AWARDS & PRESENTATIONS

TBA will present awards ribbons and a check to First (\$50), Second (\$25), and Third Place (\$15) winners in each black jar honey category based on total points earned. TBA will present award ribbons to First, Second, and Third place winners in each Polished and Photography category. Contest administrators may segregate Polished honey by color categories based on volume of contest entries.

All First, Second and Third place entries will be displayed on the top tier of our special display platform after judging and awards presentation and will remain in view for convention attendees.

Convention Grand Champion: A special award will be presented to the contestant with the highest total points across all entries.

Convention Reserve Champion: A special award will be presented to the contestant with the second highest total points across all entries.

2014 Texas Beekeepers Association Convention Registration

Please register for the annual convention on-line at
www.texasbeekeepers.org/annual-convention-2014

Make Sure you are Logged in to get Membership Rates

Registration Form for Mail Registration

Please list attendees if you register for a Family Membership

	Register by Nov. 1st	Register at Hotel	#	Total
TBA Member	\$85.00	\$95.00		
*Family Membership	\$120.00	\$135.00		
Non-member	\$110.00	\$150.00		
Practical Backyard Beekeeping - Individual	\$75.00	\$90.00		
Practical Backyard Beekeeping - Couple	\$125.00	\$140.00		
Queen's Luncheon Saturday 8th Nov.	\$25.00	\$35.00		
Annual Banquet - Adult	\$50.00	\$60.00		
Annual Banquet - Child under 18	\$25.00	\$35.00		
Total				

Name _____ Email _____

Spouse Name _____

Address _____

City _____ State _____ Zip _____ Phone: _____

**MAIL REGISTRATION FORM
AND CHECK PAYABLE TO
TEXAS BEEKEEPERS ASSOCIATION to:**

**SHIRLEY DOGGETT
MEMBERSHIP COORDINATOR
400 COUNTY ROAD 440
THRALL, TX 76578**

* Family Membership means members who have a family membership and up to 6 children living at the same address

Entry Form for Honey and Photo Contest

By Mail or at Convention

Competition Entry Form

One Form Required Per Contest Entry, Bring Entries and Fees to Registration Table at Convention

Last Name: _____ First Name: _____

Address: _____

City / State: _____ Zip: _____ Phone: _____

Entry Category (Check All That Apply: \$5.00 Fee Per Honey Entry, \$3.00 Per Photography Entry.
Only One Entry Per Category)

- ☐ Honey - Extracted Honey \$ _____
- ☐ Honey - "Black Jar" (note below) \$ _____
- ☐ Photography - Our Glorious Honey Bee \$ _____
- Total \$ _____

"Black Jar Categories"

Local Blend ____ Local Varietal ____ Non-Local Blend ____ Non-Local Varietal ____ Exotic ____

Mail to: Shirley Doggett, Membership Coordinator, 400 County Road 440, Thrall, TX 76578

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3# Package of Bees w/Queen

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Texas State Fair September 26th - October 19th 2014

Honey Booth

from John Talbert

Summer is here and it has been a roller coaster. Hot and then record cool. Seems like the rain has been at the wrong time. If your bees are like mine, you are wondering what happened to the honey crop. Hopefully the weather will moderate and we will have some more stable weather by the time for the State Fair of Texas and the Honey Booth.

There continues to be considerable interest in the honey bee by the media. I have been interviewed several times this year about the honey bee and her impact on the food supply. We have endeavored to present a very positive image about beekeepers and their importance too. If you have any suggestions for telling the story of pollination, please send them to me.

As always, your help is needed to provide the honey and funding for the booth. We need more honey than ever and we will need your financial support to be able to tell the story. We are asking the commercial beekeepers to lead the way with \$200 donations and the hobbyists \$25 or more if possible. We really need to raise about \$4000 this year. We are planning some changes to the booth this year and that will require some funding.

We also had a ten percent increase in the booth space cost.

The TBA Honey Booth at the State Fair of Texas provides the best opportunity to get our story to the public. Over 1 million consumers of the 3 million that attend the Fair pass by the booth each year according to the numbers furnished by the Texas Department of Agriculture. Exposure to each consumer costs less than 4 tenths of a cent. That is very inexpensive. Honey and bees have been the news a lot lately. This has increased the demand for honey. Help us make the Texas consumer realize that they need to purchase TEXAS HONEY.

Our Honey Queens do a great job with the cooking demonstrations that make the public aware of what a wonderful ingredient honey can be in the kitchen. Please help them tell the story. Honey will again be showcased by the Honey Queens. We are fortunate that we have more Queens sponsored by local clubs than in quite a while. Racheal Seida has said that there will be eight Queens and Princesses at the Fair. Having that many presentations will make for a really busy last weekend of the Fair. We need you to sign up for a date and we need your honey before September 20.

Can you donate a case of honey with your label, or even a jar?

Contact John Talbert at (214) 532-9241 if you can.

Can you be a volunteer in the booth to help tell the story of honey bees and honey?

Please sign up for a date!

Call or email John Talbert at john@sabinecreekhoney.com



THE BUDS AND THE BEES

May All Your Weeds Be Wildflowers

by Becky Bender, Texas Master Naturalist

A participant at the recent TBA Summer Clinic approached me with a worried look on her face. "This is bad," she said. Alarmed that she might be talking about the program I just presented, I quickly pulled her aside. She told me this: "When I was a child I used to see bees buzzing wildflowers in the yards around my neighborhood. But these days everybody maintains a perfect yard. No wildflowers. No insects. This is bad."

I've heard similar stories from beekeepers before. I embrace them as a challenge worth taking on. Maybe it is, after all, possible to grow wildflowers in our lawns and landscapes without being convicted of neighborhood treason by our homeowners' associations.

What is a Texas Wildflower?

You might say a wildflower is a native flowering plant that grows without the help of human intervention. It's typically a flower which has grown in its natural geographical region for thousands of years, evolving and adapting to local soil, weather and companion grasses. Texas has an extraordinary diversity of more than 5,000 wildflowers spread over our state's varied topography, soil types, rainfall and temperatures. In addition to providing beauty to the landscape, wildflowers help sustain nature's balance by improving poor soils, preventing erosion, healing damaged land, providing plant diversity and benefiting local pollinators and wildlife.

New Wildflower Seed Mix for Bees

Many of our most beautiful bee-friendly native wildflowers will soon be available in a seed mix through the website and catalog of Native American Seed and on the TBA website. Native American Seed and Texas Beekeepers Association are working together to select flower species best suited for our native bees and honeybees. The bee seed mix is scheduled to be available this fall and introduced at our TBA Conference in November.

Native American seed, located in Junction, Texas, specializes in ecological solutions by helping landowners use native Texas grasses and wildflowers to conserve and restore their land. The bee seed mix will contain a large variety of drought-tolerant, native Texas wildflowers that will provide nectar and pollen for bees in all seasons and will grow in various soils and regions throughout Texas. The seed mix is not intended to be planted as a monoculture that will contribute a major portion of a honey crop.

It will, however, provide beekeepers, naturalists and gardeners with some of our most beautiful and reliable bee-friendly native wildflowers that will supplement other sources of nectar and pollen.

Here are a few of the outstanding flowers that will be included in the new seed mix for bees.

Lemon Mint, Lemon Beebalm or Horsemint (*Monarda citriodora*)



Lemon Mint in June

This native annual wildflower in the Mint family has lavender to pink flowers and grows in full or partial sun in a variety of soils. It is easy to grow, reseeds generously and is ideal for an instant wildflower patch. Beginning in June, it blooms about six weeks or even longer with rain. Reliable and tolerant of poor soils, Lemon Mint is often used to restore damaged or eroded land. Lemon mint attracts native bees, butterflies and hummingbirds too. The aromatic foliage makes it deer resistant.

Texas Horsemints – which include Spotted Horsemint (*Monarda punctata*) and Basil Beebalm (*Monarda clinopodioides*) in addition to Lemon Mint – are particularly attractive to honeybees. Texas beekeepers consider these Horsemints to be one of their most important sources of honey in the state. The honey is light amber in color and can have a pronounced minty flavor. The honey has been compared to basswood honey produced in the north.

Goldenrod (*Solidago altissima*)



Golden Rod in October

This native perennial wildflower in the Aster family is usually found on uncultivated land. Its showy yellow flowers bloom in various regions of the state from August to November. It reaches a height of 3 to 5 feet in dry or semi-moist soil and will take sun or part shade. Goldenrod performs well in the background of perennial flower gardens and in pocket prairies. It's a valuable plant for restoring land that has been damaged by drought, erosion, fire or construction. It attracts butterflies, birds and native bees in addition to honey bees.

Goldenrod honey is known to be thick and heavy with the golden color of the flowers. The honey quality is poor until it is capped and ripened; then the flavor is rich and pleasant though stronger than a clover honey. In Texas, Goldenrod is a common and valuable nectar source in the late fall when honeybees store it for winter food.

Cutleaf Daisy (*Engelmannia peristenia*)



Cutleaf Daisy in May

Also called Engelmann Daisy, this is one of our most beautiful perennial wildflowers in the Aster family. It grows in a wide variety of soils and can be planted spring or fall in gardens or fields. Because it will take some shade, it does well in dappled sunlight such as along the edges of trees as well as in full sun. Cutleaf daisy is one of our earliest blooming wildflowers and blooms early spring until fall, even during drought. It attracts songbirds but also is palatable to livestock so will disappear if planted in a grazed area. I've never seen Cutleaf daisy recommended as a serious honey plant but have seen plenty of bees visiting my daisies and have seen the flower on several bee plant lists.

Growing Wildflowers: Garden or Field?

When you think of wildflowers, you may picture them in a field or along roadsides. But according to Michael Parkey, Landscape Architect specializing in native Texas plants, there are several ways to use wildflowers in a garden. With a seed mix containing both annuals and perennials (like the wildflower seed mix discussed above), you can expect a long bloom period. Prepare your soil where you want the wildflowers to grow. Choose a place that gets full or partial sun and where plants can be watered when first established. Plant your seed in the fall. Be patient while plants mature for a year or two. Annuals may grow and bloom quickly, but remember to let them set seed for the following year before pulling them up. Perennials on the other hand often need time to develop roots and may take several years to bloom. So don't give up on them too soon. Once you have a wildflower garden established, collect seed and spread them to new areas. Perennials may be spread by transplanting their roots in spring or fall.

Though wildflowers may be planted in a garden, they evolved to grow in harmony with native prairie grasses. One of the best ways to plant wildflower seeds in a field or meadow is with no-till seed drills. Drills can be calibrated to place seed at the optimal depth without costly bed preparation. Seeding rates and placement are precise, good top soil is not disturbed and existing vegetation is not damaged. No-till drill tractor equipment can be rented. Hand operated seeders are also available for smaller plots of land. By turning a hand crank, seeds are evenly distributed as you walk across prepared soil.

If you don't have a field or meadow, consider establishing a "no-mow" zone with wildflowers on the border of your yard. Also "pocket prairies" seeded with native grasses and wildflowers are becoming more popular in urban landscapes, on the border of agricultural fields, in city parks and along utility easements where natural nectar-rich habitat is limited.

Lessons Learned From Wildflowers

Most of my weeds – most of the time – are wildflowers. But I'd like to pass along a few things I've learned over eight years of seeding and watching wildflowers grow – things I never read in a book. I've learned that I cannot control where wildflowers grow, as they will set seed and drift to new places year after year. And it is always a surprise to me that some species in a seed mix will grow and flourish while others fail to emerge. For example, from the same seed mix, Bluebonnets thrive near my mailbox,

Indian Blankets cover the backyard and a variety of species show off by the fence. I've also learned to tolerate a more natural appearance to my landscape by avoiding turf grass and using native grasses that welcome the intrusion of wildflowers. But every year I must remember to delay mowing until wildflowers have set seed for the following year. To protect my bees, good bugs and birds are my pest patrol and herbicides are enlisted only with the rare invasive weed crisis.

Oh, and one more thing I've observed from growing wildflowers. It feels pretty darn good to watch my neighbors slow down as they drive past my place and admire my beautiful weeds – I mean my wildflowers.

Hey, I haven't been charged with neighborhood treason yet.

Resources for wildflower seed:

www.seedsource.com

(Native American Seed, Junction, TX),

www.wildflower.com

(Lady Bird Johnson Wildflower Center, Austin, TX),

www.wildseedfarms.com

(Wildseed Farms, Fredericksburg, TX)

Your questions, comments and observations are welcome and may be used in future articles. Send to Becky Bender at RBenderRN@aol.com.

Becky Bender will be presenting at the Texas Beekeepers Association 2014 Convention in Houston, where you will be able to hear more about Landscaping for Bees.

Be sure to join her there!

Register on-line at

www.texasbeekeepers.org/annual-convention-2014

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The Brantley Column

from S. S. Brantley
East Texas Beekeepers Association

This time of the year, beekeepers are thinking about extracting honey. After extracting, there is always the question about what to do with the freshly extracted supers. Please don't just set them aside and think, "I can get them back on the hives in a few days." Wax moths and small hive beetles are very opportunistic and will be attracted to the scent of the unattended supers, viewing them as the finest hotel accommodations a beekeeper could provide. The best solution is to return the supers to the hive and let the hive bees clean up the residual honey that remains in the cells. We call these "wet" supers. To minimize robbing, return the supers to the hives late in the evening. The hive full of bees will collect and move most of the honey to other cells before morning.

If you are not going to return the supers to the hive, put them out in the yard to let the neighborhood bees have a "clean-up day" and collect the honey. Be sure to stack the supers in a crisscross pattern or stand them on the side (long side vertical) so the bees can move between the frames. Place them in an open area away from people traffic. You will have a large number of bees flying in and out as they rob the honey off the frames. A couple of other things to think about – ants will also be attracted to the honey. If you have fire ants around, you may want to keep the supers off the ground to help keep the ants away. Also, there is usually some bits of beeswax left on the ground underneath the supers. This is not a problem in the yard but may be a concern if you set the supers on the walk or driveway. Placing a drop cloth or cardboard under the supers will prevent the wax from sticking to the concrete and make clean-up easier. If the bees do not finish cleaning the supers during the day, you may wish to pull them into a secured area at night. Many of the night varmints like coons and possums will be attracted to the frames. When your supers are clean, be sure to run them through freezer to kill any beetle or moth eggs or larvae before storing.

Someone asked if swarm traps should be taken down for the summer. There is nothing wrong in leaving swarm traps out through the end of September. Check them occasionally to make sure that wasps or other insects have not taken up residence.

Here are some interesting observations about different types of foundation in a hive. I caught a swarm July 16 and put it in a

10-frame deep. In the box, frames 1-4 were new Dadant wooden frames with plasticell foundation that I had painted with extra melted beeswax from last season's cappings. Number 5 frame was a Pierco plastic frame that was full of crystallized honey. Number 6-10 were new Dadant wooden frames with plasticell foundation, just like they come from the factory with no additional wax painted on. I did a hive inspection one week later on July 23. Since I was curious how the bees would respond to the differing types of frames used in the box, I was very careful in making the inspection. I used only a minimal amount of smoke and was very slow and careful in handling frames. The bees remained calm and were not moving about nervously in the hive. Frames 1-4, the Dadant plasticell frames with the extra coating of beeswax, showed a lot of activity. Frame 1 was almost completely drawn on the outside and fully drawn and 75% full of pollen on the inside. Frames 2-4 were fully drawn and contained eggs, larva and pupa. The number 5 Pierco plastic frame had been cleaned of the crystallized honey and was 75% full of nectar. Frames 6-10, the new, unused plasticell frames, showed little activity. Frames 6 and 7 had a spot drawn spot in the middle top of the foundation, about the size of my three fingers in length and width. The center of this area was fully drawn and had some nectar in the cells. The cells away from the center were less drawn, tapering to nothing at the edges. Frames 8, 9 and 10 were untouched and had only a couple dozen bees crawling on them.

I don't claim this to be a scientific study but I am intrigued with the observations. Several years ago, in one of the bee publications, I read a letter from a beekeeper who routinely brushed his new plasticell frames with melted capping wax, claiming it enticed the bees to begin drawing comb quicker. I doubt that the thickness of the additional wax is the reason the frames are more attractive to the bees. Rather, I tend to think that the extra coating of melted capping wax gives the new frames a more attractive odor, making them smell more like a beehive rather than the human and mechanical smells picked up in the production process. Based on what I saw here, whenever possible, I am going to give my new plasticell frames a brushing of melted capping wax.



BEGINNERS' BOX

from Cameron Crane, Liberty County Beekeepers

Honey Bee Races

It has been so wonderful seeing all the new people taking an interest in Beekeeping. We are seeing lots of new faces at meetings in the Houston area. I was attending a meeting where they were talking about where to get bees. Someone asked, "What kind of bees are they?"; and the reply from someone was, "I don't know. They are honey bees." A little later in discussions, a newcomer asked, "What's the difference in the different kinds of bees?" I found the answer that one of the members supplied a little disappointing. It was, "It's about how mean they are and how much honey they produce." For anyone who has looked into the different races of honey bees, there is much more to it than just temperament and honey production. Although these are amongst the most important traits for the beekeeper, many other traits affect the handling, management and survivability of hives.

In Europe, the Americas and Australia, the term "honey bee" means a bee of the species *A. mellifera*. Within the species, there are sub-species and sub-sub-species also known as breeds, races or stocks. The old races of centuries ago were lineages that had adapted to different regions, climate, and available hive locations. If you would like a more thorough explanation, see:

http://en.wikipedia.org/wiki/Honey_bee_race

Before the invention of removable frame hives, beekeepers typically kept bees in skeps and would kill the hive to harvest the honey and wax. The old time beekeeper would select which skeps they were going to keep for the next year and which ones to harvest. Selection for the following years' stock was based on the honey bee traits the beekeeper liked. Italian beekeepers had a high liking for gentleness; and thus, the Italian bees are known for their gentleness. Some of the original honey bee races included Italian, Carniolan, Cordovan, Caucasian, and Nigra- black bee. In the last 200 years as travel increased and transportation improved, beekeepers moved with their pure, imported honey bees into areas that may have had other imported stock and feral honey bees. These bees would breed with each other. In current times, some beekeepers work hard to maintain purer lineages through isolated mating yards.

Little was known about the life cycle and habits of honey bees before the studies by the Swiss naturalist Francois Huber (1750-1831.) Huber's investigations laid the foundation for scientific knowledge of honey bees and started a significant movement in the 1800's to better understand, control, and breed honey bees.

Selective breeding looks for many different desirable traits for which to breed. Typically, beekeepers breed for gentleness, spring build up, honey production, fall size reduction, lack of robbing behavior, wintering hardiness, drone production level and excessive swarming. Before the 1900's, higher swarming tendencies was a sought after trait because catching swarms was the way to increase the number of hives. After the advent of the removable frame hives, honey bees that made less propolis and swarmed less became desirable traits. However, all of these traits have advantages to the bees and/or the beekeeper. No race or mixture of races has a perfect balance of desirable traits. The

Italian is a very gentle bee but is much more prone to robbing honey out of weaker hives. Northern beekeepers are more concerned about winter hardiness where those of us in the South are not since we don't have long, harsh winters. Selecting or breeding bees that produce less propolis makes it easier for the beekeeper to work their hives. But, the purpose and function of propolis is to help keep the hive healthy, so does breeding for honey bees that make less propolis hinder the healthiness of the hive?

To my knowledge, the first person to conduct in-depth studies into breeding bees for desired traits was Brother Adam (Karl Kehrle 1898-1996) at Buckfast Abbey located in Devon, England. At the time, tracheal mites were killing hives by the thousands in the British Isles. Few hives were surviving; and in 1916, only 16 hives were left at Buckfast Abbey. Brother Adam started breeding for pest resistance. His is an interesting story to read: http://en.wikipedia.org/wiki/Buckfast_bee.

Since Brother Adam's success, breeding honey bees has taken new directions which brought about a whole new set of traits that breeders target such as resistance to tracheal mites, nosema, American foul brood, chalk brood, and European foul brood. Another harmful pest first found in the United States in 1987 is the varroa mite. They have had a major impact on both feral and kept bees. Since 1997, The USDA Honey Bee Breeding, Genetics & Physiology Laboratory in Baton Rouge, LA has conducted very promising studies in breeding bees to combat varroa mites. The lab imported Russian honey bees for their varroa resistance. They found that some bee colonies had mite populations that only grew slowly. The study also found that the bees in these hives had a hereditary trait that kept the mite population in check. This trait was found to be hygienic and was eventually named the Varroa Sensitive Hygiene (VSH) trait. VSH is an activity of adult bees to detect and remove pupae (capped brood) that are infected with mites. The VSH trait has been successfully bred into many different races maintaining a relatively good mite resistance while still developing other desired characteristics like honey production, brood build up and reduced swarming.

Many new beekeepers want to know what is the best type of bee to get. There is no clear answer or best choice for everyone. Thus comes one of my common statements about beekeeping which is beekeeping is about choices. I've read that newer beekeepers should try a few different types of honey bees. I won't disagree. It is my feeling that first time beekeepers should start with a gentle bee. I've seen several people get out of beekeeping because they did not enjoy dealing with temperamental or more aggressive bees. Having acquired a fair number of hives from swarms and from bee removals, I've dealt with more than enough mean bees (Africanized.)

There are a growing number of hobbyist beekeepers choosing to keep bees chemical free. This can be a more challenging a choice. I highly recommend that if you are going to practice chemical free beekeeping, get bees with more resistance to

diseases and pests. Keep in mind you'll still need to stay on top of IPM (Integrated Pest Management). I also think you are going to have an easier time working with bees that are bred and accustomed to your own climate.

What are my experiences with some of the different races? A few years ago, I got three hives of supposedly "Russian" bees. These first Russians were mostly calm enough, but they do love to propolis EVERYTHING up thick! By the end of the first major flow, I'd named the hives "the weak", "the medium", and "the strong." The strong has been split every year, and each split built back up quickly and remained strong. The medium has remained medium and is still holding on as a double deep but yet to ever fill a super for me. The weak hive would never move up into a second deep and died this past winter. All three had their times when they were not happy about me opening the hive. Last year and again this year, I bought some more Russians as nucs but this time from a source that was breeding from Russian queens purchased from the Russian Honey Bee Breeder Association. This better, true source of Russians still propolised quite a bit but not near as bad. They also were not as temperamental as often and have all been good producers.

Mid-spring this year, I added to my main apiary five packages of Minnesota Hygienic bees bought in Texas. I'm amazed at how calm they are ALL THE TIME. When I go into those hives, I do not smoke them, I only give them a little squirt of sugar water. They built fast, and three of the five hives of the Minnesota Hygienics actually filled some supers this first year. We are already planning to add more of these. I know a few hobbyist beekeepers who keep some rather aggressive bees. They tell me it's because meaner bees produce better. My experiences have me doubting there is any truth to this; and if so, is it really worth the extra hassles? My short time of experience with these Minn. Hygienic bees has me convinced it's bunk, but I'll hold my final judgment until I see how they come out of this coming winter and into the spring. Remember: Beekeeping is about Choices – Your mileage may vary.

Honey Bee Races (BREEDS)

Italian: *Apis mellifera ligustica* - First brought to the U.S. in 1859. A favored bee stock in the US. There are light colored strains and darker/leathery colored strains. The light colored strain exhibits more of the weaknesses of the Italians and is more susceptible to tracheal mites. The darker line is shown to be very resilient against tracheal mites. This likely explains why my research shows disease resistance as a strength in some places; and in others, it lists susceptibility to diseases as a weakness. So, I did not include either in the below list of strengths and weaknesses. Italians' strong brood rearing is a great advantage at times but is also a drawback in nectar dearths and in the winter where they consume more honey stores.

Strengths: Very calm, non-aggressive bee, excellent honey producers, light coloring has aesthetic appeal to many beekeepers despite the drawbacks of the light colored Italians, reluctance to swarm, zeal for building comb, white honey-cappings, a willingness to enter supers, cleanliness (good housekeepers), uses little propolis, a strong disposition to breeding, and very prolific.

Weaknesses: Prolonged brood rearing/inclined to excessive brood rearing, high consumption of stores thus may consume

surplus honey if supers are not removed immediately after the honey flow stops, known for their tendency to rob honey from weaker hives which can also increase spread of disease, tendency to drift (bees joining other hives) which is caused by a poor sense of orientation, tends to forage over shorter distances (less effective in poorer nectar flows like our Texas summers.)



Italian Honey Bee

Cordovan: A genetic trait, usually found in the Italian race. Due to the wide variance in color, Cordovans are used mainly for tracking genetic makeup.

Strengths: Usually found in strains of Italian honey bees, attractive coloration makes queen location easier, superb comb builders, very gentle, coloration trait is useful in breeding programs, Cordovan trait may be bred into any race of honey bee, Cordovans are available in the US.

Weaknesses: Consume large amounts of food in winter, Italian Cordovans may perform poorly in cold, wet conditions, Cordovan trait is recessive.



Cordovan Honey Bee

Carniolan: *Apis mellifera carnica* - Native to Slovenia, southern Austria, and parts of Croatia, Bosnia and Herzegovina, Serbia, Hungary, Romania, and Bulgaria. Also known as the Grey bee.

Strengths: Considered to be gentle, sense of orientation better than the Italians, less drifting of bees from one hive to a neighboring hive, not as prone to rob honey as Italians, overwinter in smaller numbers, quickly adapt to changes in the environment, increase/decrease brood rearing quickly based on nectar flows, low use of propolis, resistant to brood diseases, workers live up to 12% longer than other breeds, early morning foragers that will forage on cooler and wetter days than other breeds, creates less brace and burr comb.

Weaknesses: More prone to swarming if overcrowded, low ability to thrive in hot summer weather, Unless marked the dark queen is difficult to find, brood rearing diminishes greatly when pollen is scarce.



Carniolan Honey Bee

European Dark Bee: (AKA black bee or German bee) *Apis mellifera mellifera* - Originally distributed in some parts of central, western and northern Europe. These were the first bees brought to the Americas around 1600. This distinctly marked bee is brown and black in color and overwinters well. Recent genetic testing shows many feral bees populations that maintain a genetic marker of the black bee, but most of the purer stock has been eliminated by pests and disease in the last several decades.

Strengths: Overwinters well, decent yield even in poor years, needs very moderate food supplies.

Weaknesses: Slow Spring build up, more aggressive than other preferred breeds, not sold in the US.



European Dark Bee

Caucasian: *Apis mellifera caucasica* - Originates from the high valleys of the Central Caucasus. Georgia is the "central homeland" for the species, although the bees also can be found in eastern Turkey, Armenia and Azerbaijan. Purebreds hard to find in the US.

Strengths: Gentle and calm, ardent brood production - raising strong colonies, colonies reach full strength in mid-summer (good for areas where the highest nectar flow is in mid-summer), very heavy use of propolis, a longer proboscis can reach nectar other honey bees can't, low swarming instinct, quick fall size reduction.

Weaknesses: Colonies do not reach full strength until mid-summer (not good for Texas where the highest nectar flow in the spring), the heavy use of propolis may be seen as undesirable as it makes hive management more difficult, frames and hive boxes are glued together more substantially, over wintering in northern climates not good due to susceptibility to nosema, inclined to drifting and robbing.



Caucasian Honey Bee

Buckfast: Developed by Brother Adam at Buckfast Abbey (see ref. in first page of this article.)

Strengths: Highly tracheal mite tolerant, extremely gentle, low swarm instinct, over-winters exceptionally well, well suited to cool, wet climates, good honey producer, prolific queens (lay many eggs), frugal - low amount of brood during fall (uses less honey stores during winter), packs brood nest with honey for good wintering, curtails egg laying during dearths, low incidence of chalk brood and wax moths due to good house cleaning techniques, very hygienic, build-up rapidly once started, produces little propolis/brace comb, does well in cold/wet springs.

Weaknesses: Not widely available, slow spring build-up, poor early spring pollinators, low amount of brood during fall, less honey or pollen due to erratic spring weather conditions.



Buckfast Honey Bee

Russian: Originated in the Primorsky Krai region of Russia. Controlled in the U. S. by the Russian Honey Bee Breeders Association who work hard at maintaining purity and diversity of the stock.

Strengths: Strong resistance to varroa and tracheal mites, higher use of propolis. Russian breeders are selecting breeder queen first for varroa resistance and then for honey production. I found little information listing strengths and weaknesses of



Russian Honey Bee

Russians. My personal experiences are they survive well without chemical treatment. I would not classify them as mean bees; but at times, they have been testy or moody. I handle them with extra gentleness and don't go into the hives too early or late in the day or on poor weather days (good practices for all honey bees.)

Minnesota Hygienic, VSH and other modern breeds.

I did not find much information about the newer breeds to be able to present a proper list of strengths and weaknesses. Many seem to maintain traits of the sub-species they were bred from.

Most of the reputable bee suppliers will have information about the characteristics of their bees. I'll close with some notes on some of the newer options:

The Minnesota Hygienic stock has been selected for its exceptional house cleaning ability, significantly reducing the negative effects of most brood diseases. The VSH stock is not an independently viable stock on its own (because of inbreeding), the VSH/SMR (suppressed mite reproduction) trait has been incorporated into other genetic stocks so that these stocks may also express this highly desired characteristic. The Cordovan bee is a type of Italian bee that has a very light yellow color, which is more attractive to many beekeepers.

Numerous hybrid stocks are also available commercially: The Midnight bee was developed by crossing the Caucasian and Carniolan stocks, hoping to maintain the extreme gentleness of both strains while removing the excessive propolis of the Caucasians and minimizing the swarming propensity of the Carniolans. The Starline was developed from numerous strains of the Italian stock by Gladstone Cale of the Dadant Bee Company. It was once favored by commercial beekeepers because of its tremendous honey yields, particularly in clover, but the popularity of this stock has declined in recent decades. The Double Hybrid is a cross of the Midnight and the Starline. The "Smart" strains are crosses between the SMR strain and other stocks, such as Italian, Russian, and Carniolan. The "All-American" from R Weaver is based on the darker Italian stocks. The "BeeWeaver" strain has been raised chemical free since 2001, selecting from stocks that showed strong resistance to varroa mites.

Conclusion: There is a lot of variation between races and the different strains bred from those races. These differences give each advantages and disadvantages. Beekeepers should choose which ones fit their needs best. Experience some of the available breeds and decide which is best for you.

Remember: Beekeeping is about Making Choices.



Hayden Wolf with the Mayor of Gladewater, the City Secretary and the Fire Chief at the Gladewater Lion's Club



Hayden Wolf speaking to over 100 Pre-school 5th Graders at Kids R Kids Daycare

Chief of Apiary Inspection - Texas Apiary Inspection Service

from Mark Dykes

Greetings from the Texas Apiary Inspection Service. I hope everyone's bees are still buzzing despite the heat. We have been busy over here at TAIS with updating and reorganizing the department. We are happy to announce the addition of a new inspector, Mary Reed. Mary will be coming to us via the citrus greening program at the University of Florida. She has worked with the citrus industry on identifying and controlling the citrus psyllid, the vector for citrus greening. Mary is also hobby beekeeper and is very excited about joining our program. I can say without reservation that we are very happy to have her and the experience she brings will be valuable to our program. Please help me welcome Mary to our state!

We are happy to report that the Bee Informed Partnership (<http://beeinformed.org/>) has contacted us and are planning on placing a Tech Transfer Team in Texas in 2015. This is great news for the commercial beekeepers of our state. The Tech Teams provide assistance to commercial operations in selecting hygienic stock, disease and pest diagnostics and hive assessments. The teams operate independently and all results are kept confidential. Beekeepers are given all test results in near real-time so that they can adjust their operations and improve production. If you would like more information on the Tech Transfer Teams please contact me at Mark.Dykes@ag.tamu.edu or call me at (979) 845-9714 and I will be happy to provide you with more information. You can also find more information on the web at <http://beeinformed.org/team-2/tech-transfer-teams/>.

Lastly I would like to take a moment to clear up some confusion about one of the permits that the Texas Apiary Inspection Service issues. I have been contacted by several beekeepers regarding the requirements for obtaining a bee removal license. I feel that some clarification is needed in this area to those conducting bee removals and about the use of the bee removal permit. Beekeepers are exempt from the structural pest control licensing requirements under section 1951.056 if:



1. is registered with the chief apiary inspector as provided by Subchapter C, Chapter 131, Agriculture Code;
2. does not use pesticides or electrical devices other than conventional bee smokers or equipment as defined by Section 131.001, Agriculture Code; and
3. collects, removes, or destroys honey bees.

The bee removal permit issued by TAIS permits bee removers to move disease free colonies across county lines and as an added benefit to the bee remover their names are posted on our website for the general public to contact regarding removals. To be clear the bee removal permit is NOT in any way a license to remove bees. In order to avoid confusion in the future we are changing the name of the permit to the Bee Removal Transportation Permit. I hope this helps to clear up any confusion and as always feel free to contact us with any questions.

I hope everyone has a safe and enjoyable summer and you find a way to beat the heat. I look forward to seeing you all at the local club meetings we speak at and start thinking about attending the TBA meeting in November. I know I'll be there and I hope to hear some good bee jokes there too.

As always keep on keeping bees.



Hayden Wolf with her Father Gus at the Big Sandy 4th July Parade

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Greetings from Dr. Juliana Rangel at Texas A&M University

Assistant Professor of Apiculture, Department of Entomology, Texas A&M University

Howdy TBA members! It's been a while since I wrote my last column, given that we were busy getting ready for the TBA Summer Clinic, which we hosted at the Janice and John Thomas Honey Bee Facility of Texas A&M University on Saturday 7 June. As promised, the TBA organizing committee and all the wonderful volunteers worked really hard to prepare and deliver a fully-packed, informative and productive agenda for all attendees. I am sure you will read a summary of the event in this same newsletter so I won't go into details, but we had over 320 participants and are very grateful to all of you who helped us with any aspect of the event. By all standards, I believe it was a success and I am happy to know that many of you have now visited our research facility! Among the many talks, we heard from our Master's student Adrian Fisher, who delivered a great talk on his research project looking at the reproductive viability of drones in our region based on different experimental treatments.



Graduate Student Adrian Fisher Painting 1-day old Drones for his Drone Viability Study

In June we conducted our first Aggie Honey extraction event and we were amazed at the variety of honey colors we observed (see picture). Our students and staff worked very hard to harvest the honey and we are very grateful for their hard work and dedication to our fund-raising efforts (see picture). We will let you know via our Facebook page when the honey becomes available at <https://www.facebook.com/TAMUhoneybeelab>. The honey will only be sold at the TAMU Rosenthal Meat Market, so stay tuned because I believe it will sell out fast, especially when Fall and football season come around. Remember that all proceeds from Aggie Honey sales go back directly to help fund our research program and students.

Have any of you heard of the Tech Transfer Teams (TTT) organized by the Bee Informed Partnership? If not, I encourage you to visit their website at <http://beeinformed.org/team-2/tech-transfer-teams/>. It turns out that the next TTT is being planned to be created right here in TX and hosted at our bee

lab in College Station! As their website says: "Highly trained to evaluate, sample, and inspect honey bee colonies, our Tech Transfer Teams interact with important stakeholder groups including commercial queen breeders, large honey producers, and commercial operations specializing in

pollination services for our food system. Our teams conduct and demonstrate the importance of monitoring disease and parasite management while working with beekeepers in the field to collect samples, offer support, and analyze results. Together, beekeepers and Tech Transfer Teams interpret real world disease levels to make informed decisions about future treatments and hive management decisions."



The Different Colors of Spring 2014 Aggie Honey

Along with the Texas Apiary Inspection Service, we hope to identify commercial beekeepers that want to participate in the TX TTT, which we hope to launch in 2015. And as part of this process of “shopping” for interested participants, I want to bring to your attention one study that we want to conduct in the Spring of 2015 for which we need your help, as follows:

We are looking for queen producers at the sideline and commercial level in Texas (and potentially other regions in the country) that are willing to participate in a pilot study conducted in the laboratory of Dr. Juliana Rangel, Assistant Professor of Apiculture at Texas A&M University in College Station, TX. In general terms, the study will be looking at the reproductive quality of mated queens from their operation from the first “catch” of mated queens in early spring, through several stages of the “catching” process, all the way to the final batch of mated queens that they sell to the public. We are looking for at least 10 queen breeders/producers that will be able to supply us with at least 10 naturally queens “per catch”, along with a 3inX3in patch of sealed brood from that specific queen that can be kept in dry ice (for queen mating frequency analysis) that they can send to us while the queens are still alive in cages with a few attendants and food.

Our plan is to collect data on the reproductive quality of the queens from each operation at the beginning of the queen-rearing season (March), throughout the most productive months (April-June) and through the end of their stay in TX (if they are migratory beekeepers that later stop their queen-rearing operation and move to other states for honey production and/or pollination services).

The type of questions we want to address are:

- What is the reproductive quality of the queens in your operation?
- How well mated are your queens?
- What is the sperm viability of your queens?
- Are there differences in queen quality in your operation depending on when the queens mated? (March vs. July for example)

Using molecular and laboratory techniques, the type of information that we are hoping to collect from each queen (and their sealed brood) is the following:

- Mating frequency (number of drones each queen mated with, which is obtained from the sealed brood provided along with the queen)
- Sperm counts (# sperm in spermatheca)
- Sperm viability (proportion of sperm that is alive in spermatheca)
- Ovariole number
- Fat body content
- # of queens that you produce per batch
- # of colonies in the mating yard, and # of colonies for drone sources
- Rough location of operation to try to get weather data
- Exact date of grafting and catch
- Other data depending on budget and state of queens

By volunteering to participate in this study and provide us with the queens in at least 4 “catches or batches” in the 2015 season, in return Dr Rangel’s laboratory will cover the costs of



Adrain Fisher and Alejandro Martinez Bottling the First Batch of 2014 Aggie Honey

the laboratory analyses and each participant will receive a “bill of health” in Fall 2015 with the above information. Your identity and location will be recorded but will be kept anonymous, and we will conduct the study blindly, so that the person conducting the analyses does not know whose queens he/she is working with until the results are given. This will be confidential but if requested, you will be able to see the equally anonymous results from other queen breeders in your area.

We hope to identify and have the commitment of volunteers by Fall 2014 so that we can create an operating budget and get all the supplies acquired to start the data collection process as soon as possible.

That is all for now. If you want more information about our research, please do not hesitate to email me at jrangel@tamu.edu. I wish you a happy and productive honey season. In the meantime I hope you keep doing your varroa counts!!

Happy beekeeping!

Dr. Juliana Rangel and Mark Dykes will both be presenting at the 2014 Texas Beekeepers Annual Convention in Houston.

Please go to

www.texasbeekeepers.org/annual-convention-2014

and register to join us at the Crowne Plaza - Reliant from November 7th through November 9th.

Texas Beekeepers hold Summer Clinic at Honey Bee Lab

from Jimmie Oakley

The Texas Beekeepers Association held the 2014 Summer Clinic at the Janice & John G. Thomas Honey Bee Facility on the Texas A&M Riverside Campus in Bryan, Texas on Saturday June 7th. It was going to be another Texas hot summer (late spring) day, but the large trees along the parkway and the circus size tent set up offered some relief from the bright cloudless day as beekeepers began to arrive early and park on the grassy field north of the building.

The Honey Bee Lab research assistants and volunteers, lead by Dr. Juliana Rangel, and the Texas Apiary Inspection Service (TAIS) staff under the direction of Mark Dykes, Chief Apiary Inspector, and Texas Beekeeper Journal Editor, Chris Doggett, along with some TBA volunteers worked hard to get the parking laid out, the tent erected, the grounds spruced up, and the tables and hundreds of chairs set up on Friday before the event could take place. Everything was ready. The location was an excellent choice to hold the event since nothing had showcased the facility since it had opened and most beekeepers had never had an opportunity to visit the lab. The TAIS is housed in the north end of the same building and this gave the beekeepers a chance to view that program also.

Registration for Saturday morning was set up north of the building on the concrete handicapped parking pad, and was ably handled nicely by three couples, Kay & Jimmie Oakley, Susan and Scott Kilpatrick, and Lisa & Russell Dittfurth. As part of registration, Mark Dykes provided a survey that everyone could take about expectations of TAIS.

After registration, many of the beekeepers began to assemble for a tour of the Honey Bee Lab and TAIS conducted by Lab Research Assistants Alex Martinez and Laura Weler. Others just gathered under the trees seeking a cool spot to visit and catch up with fellow beekeepers since last year. Several vendors set up and made beekeeping items available. Shirley Doggett and Ginny Stubblefield (WCABA) had the latest TBA caps, shirts, and polo's for sale in front of the Lab building, and Jay and Jessica Poindexter, Montgomery County Beekeepers from Conroe, set up to sell ventilated bees suits, which proved to be a hot item (brisk sales).



Dr. Juliana Rangel introducing Dr. Vaughn Bryant along with Dr. David Ragsdale

Dr. Vaughn Bryant with the Texas A&M Dept. of Anthropology, Pathology Laboratory, was scheduled to give a presentation on the identification of pollen found in honey before lunch. He spoke in the main conference room of the Lab facility and was introduced by Dr. Juliana Rangel. Dr. David Ragsdale, Head of the Entomology Dept., preceded him with a welcome of the beekeepers to the Lab.

Texas Bar-B-Que with all the trimmings from J. Cody's Stakes & Barbeque in Bryan was on the menu, and everyone lined up fill their plates from the buffet set up under a 20x10 tent across from registration.



Bill Baxter with a hands-on visit to the Lab Apiary

By one o'clock, with almost everyone fed, the afternoon sessions started in the conference room and various labs in the building. The attendees had a choice of four different presentations taking place in four different rooms simultaneously, plus the opportunity to visit the Lab's apiary (bee yard) with Assistant Inspector, Bill Baxter, provided you wore protective clothing. In addition Dean Cook from Houston was giving demonstrations under the trees of top bar beekeeping, and TBA VP, Chris Moore, showed how he made splits with his demo hive (minus the bees).

Even though the afternoon was divided in to four educational sessions, and every effort was made to seat all who wanted to see, it was a challenge for many to know what to choose. Dr. Rangel gave an update on the TAMU Honey Bee Lab a couple times, followed by Mark Dykes sessions on expected changes and plans for the TAIS presently and in the future. Becky Bender from Dallas (CCHBA), assisted by Michael Parky, gave her popular presentation on Beescapes, Planting for Bees. Lance Wilson from Austin (WCABA) addressed the issue of Varroa Mite control through Integrated Pest Management (IMP).

E. T. Ash, an experienced beekeeper from Central Texas and the Lab Technician, demonstrated extracting honey (from the Lab apiary). Other Honey Bee Lab researchers also presented. Rong

Ma spoke on Effects of Brood Pheromones of Foraging, Adrian Fisher addressed Drone Reproductive Health, and Daren Eiri explored the subject of Queen Gut Microbiota. Shelby Kilpatrick, an entomology major at A&M, spoke on Pheromones, and John Hicks (MCBA) gave a program on Honey Marketing.

There were royalty in attendance. The 2014 Texas Honey Queen, Hayden Wolf, from Big Sandy came with her father, Gus Wolf, President of East Beekeepers Association. East Texas Honey Queen, Carrie Lenamond, from Wills Point and Willow Lanchester, East Texas Honey Princess from Tyler, Texas, represented their association. Collin County Honey Queen, Tabitha Mansker, from Nevada, Texas, and CCHBA Honey Princess, Hope Pettibon, from McKinney made the trip also. An information table and an observation hive were set up on the porch of the Lab where the ladies spent time educating the attendees.



Lance Wilson, Certified Master Beekeeper, with a presentation on Integrated Pest Management



Chris Moore, VP of TBA, gives a Presentation on Splits



Dean Cooke with his Top Bar Hive Presentation

A drawing for door prizes was conducted by Dr. Rangel and the Lab staff as the final activity for the day, and many went home with a souvenir of the event.

The turnout of 313 for the event exceeded any previous summer clinic attendance. Considering the importance and the interest of the Lab, it was not surprising. Collin County Beekeepers had the largest number in attendance with 39, and Williamson County had 30. Montgomery County hosted the event - many thanks for their volunteers - and 30 attended from that association. There were thirty East Texas beekeepers in attendance. Central Texas, Alamo Area, and Brazos Valley were all in double digits with 17, 14, and 10 respectively. The two Houston clubs, Houston Beekeepers and Harris County combined had 13, and there were seven attending from Trinity Valley. In all there were 24 clubs represented from around the state with beekeepers attending including Dino-Bee, Concho

Valley, Northeast Texas, Austin Beekeepers, Coastal Bend, Hot of Texas, Liberty County, Metro Beekeepers, Pineywoods, Caddo Trace, Fayette County, Fort Bend and Walker County.

A special thanks again goes to the leadership and staff of the Honey Bee Lab and TAIS for giving us an informative look at what goes on at the Janice & John G. Thomas Honey Bee Facility.





2014 Texas Honey Queen Hayden Wolf

The Buzz on Glyphosate

Hello Texas Beekeepers!

It was so nice to see many of you at the TBA Summer clinic in June! I'd say it was a huge success, thanks to the hard work of those who put it together. I've had a fairly steady flow of events this summer- you can check out my event chart at the end of this article to see where I've been.

We just extracted 10 gallons of honey from four of our hives and I couldn't be happier! The honey from one of our supers was the best I've ever had. It tasted like toasted marshmallows! We had a young friend who is interested in beekeeping come help us extract and Dad and I took him into the hives while waiting for the fume board to clear all the bees out of the supers. He was so excited about seeing the bees and helping extract the honey! It turned out to be beneficial for all of us- he got to experience beekeeping (which he's now going to be getting into!), and we got some much appreciated extra help with extracting. I think he could have happily stayed in there all day cutting capping off the frame and cranking the extractor! If you know of someone (especially a kid) who is interested in beekeeping, consider having them come help you extract. It's a great time to tell them everything you know about honey bees, and it can be a joy, and benefit to you both!

I've had quite a few people ask me this year if the herbicide, Roundup is safe to use around bees or if it has any affects on them. After a lot of research, here is an article that will hopefully answer the question. First I have to give some background on what exactly glyphosate is and where it is found before I can start on what it does and how it relates to bees. So please bear with me!

I. What it is

Glyphosate, the main ingredient in the common herbicide "Roundup" (made by Monsanto), is a broad-spectrum systemic herbicide used to kill weeds and grasses that compete with commercial crops around the world. It is the best-selling herbicide, used on over 150 crops in over 90 countries [1] and in 2007 was the most popular herbicide in the United States agricultural sector with 180-185 million pounds applied. It was also the second most used herbicide in home and garden market where users applied 5-8 million pounds; additionally, industry, commerce and government used 13-15 million pounds [2].

Roundup is also increasingly used as a desiccant (knock down

agent) on grain crops prior to harvest to dry them out, increasing harvest yield and making them easier to store without rotting. One of the crops it's used on for this purpose is sugar cane (which we feed to our bees).

Other uses include clearing railroad tracks, along sidewalks and streets, garden maintenance, and to get rid of unwanted aquatic vegetation.

It is most widely used however, in agriculture, specifically on Genetically Modified (GM) Roundup Ready (RR) crops. Common GM RR crops include, but are not limited to, alfalfa, canola, cotton, sugar beets and corn.

One thing I was shocked to find while researching is that in 2010, Roundup was patented as an antibiotic (Patent number: US 7771736 B2) [3].

II. Where it is found

When GMO RR crops are sprayed with roundup, it is absorbed into their tissue. When glyphosate breaks down, it doesn't vanish into a harmless basic element, but degrades into a much more residual compound called aminomethylphosphonic acid (AMPA) which remains in the plant along with the glyphosate [4]. The United States Environmental Protection Agency (EPA) stated in a report that Glyphosate is "extremely persistent under typical application conditions". Studies in Sweden showed that one application can last up to 3 years, making it one of the most residual herbicides [5].

Even so, last year the EPA went ahead and actually doubled the amount of glyphosate that is now allowed in food. Soybean oil, for example, can now contain levels as high as 40 parts per million of glyphosate [10b].

A new study published in the journal Environmental Toxicology and Chemistry revealed that Roundup and its still-toxic degradation byproduct AMPA were found in over 75% of the air and rain samples along with other herbicides and pesticides. The research was done over a 12 year period by the U.S Geological Survey and the percentages for glyphosate and its degradation product AMPA were found to be even higher than other pesticides in the air and rain [6] [7].

According to another study, published in the journal Analytical and Bionalytical Chemistry, 41% of the 140 groundwater samples taken from Catalonia Spain, had levels beyond the limit of quantification. This indicates that glyphosate

doesn't break down as quickly as thought but accumulates in the environment [8].

Just to give you an idea of how widespread it is, research done in Germany found concentrations of glyphosate that were 5-20 times the limit for drinking water in human urine samples [9]. Another study found levels of glyphosate in American women's breast milk at 760-1600 times higher than the EU permitted level in drinking water but still below the amount allowed in US drinking water [10].

III. How it works

When glyphosate is sprayed on a plant it is absorbed through the foliage and is translocated to the growing points [11]. It can also be taken up by the roots in contaminated or treated soil. Its mode of action is to inhibit an enzyme involved in the making of the amino acids phenylalanine, tyrosine, and tryptophan (an amino acid that is present in bee pollen, and bee bread) [12].

By its very nature as an antibiotic, glyphosate kills both good and bad bacteria in soil, plants, and animals and is toxic to microorganisms possessing the Shikimate pathway. According to Wikipedia, "the Shikimate pathway is a seven step metabolic rout used by bacteria, fungi, algae, parasites, and plants for the biosynthesis of aromatic amino acids (phenylalanine, tyrosine, and tryptophan)"[13]. Some say that glyphosate is completely harmless to humans and animals because our cells don't have the Shikimate pathway which glyphosate inhibits. However, our gut bacteria DO have this pathway! Glyphosate has also been shown to kill two beneficial bacteria in the gut called lactobacillus (which is essential in the digestive tract of all animals and humans) and bifidobacterium [14] [15].

Now you're probably wondering, how do honey bees fit into all of this?

Well, I came across an article on bee bread by Clarence Collison in the June 2014 issue of Bee Culture Magazine [16]. The article talked all about bee bread and the bacteria used to make it. Guess which bacterium are essential in the making of bee bread? Lactobacillus and bifidobacterium (which glyphosate has been shown to kill)!

Mr. Collison's article states: "honey bees typically do not consume raw pollen as it is collected and packed in the pollen baskets in the field. Instead workers process pollen that they collect by packing it into brood combs cells, adding glandular secretions to it, and sealing it with a drop of honey. Pollen stored in this way undergoes a fermentation process and becomes what is called "bee bread"...Bee bread is chemically different from pollen: it has a higher vitamin content, lower amounts of complex polysaccharides, a shift in amino acid profile, and lower pH. It is routinely suggested that these changes in nutritional composition are a result of the microflora that is present in stored pollen"

"Honey bees fed bee bread live longer than those that are fed pollen and are better able to offset physiological damage from pests when bee bread is abundantly available." "Vasquez and Olofsson (2009) identified a large flora of lactic acid bacteria in the honey stomach of the worker honey bee. The presence of this flora in bee pollen and bee bread was investigated." (Note: In that study, the flora referred to was lactobacillus and bifidobacterium which is composed of 12 different phylotypes).

The article went on to say "it was demonstrated for the first time that bee bread is probably fermented by the honey stomach lactic acid bacteria flora that has been added to the pollen via regurgitated nectar from the honey stomach. This discovery helps to explain how honey bees standardize the production of bee bread and how it is stored. The presence of the honey stomach lactic acid bacteria and its antimicrobial substances in bee bread also suggests a possible role in the defense against honey bee diseases since the bee bread is consumed by both the larvae and the adult bees"

The results of another study (one done by Vasquez and Olofsson, mentioned in Mr. Collisons article) demonstrated that honey bee stomach lactobacillus bacteria flora and two lactobacillus phylotypes strongly inhibited the growth of P. Larvae, the bacteria responsible for American Foul Brood (AFB). This study concluded "the results clearly demonstrate that the addition of Lactobacillus to young honey bee larvae exposed to P. Larvae spores decreases the proportion of larvae that succumb to AFB" [17].

Even Randy Oliver (scientificbeekeeping.org), who writes for American Bee Journal states in one of his articles, "The complexity of the battles raging within the bee gut becomes mind-boggling! Take, for instance, the wrestling match between the beneficial endosymbiotic bacteria, the virulent bacteria that cause AFB and EFB, and the fungus that causes chalkbrood. Friendly bacteria such as Bacillus subtilis, Lactobacillus and Bifidobacterium inhibit the growth of the pathogenic organisms by secreting antibacterial and antifungal substances" [18].

Obviously the lactobacillus and bifidobacterium, which are just two of the beneficial bacterium in a bees gut, are extremely important not only for making bee bread but for the bees' general health and to fight off harmful pathogens.

Knowing this, it might be prudent to avoid using any product containing glyphosate near or around your bees. Here is an excellent alternative to glyphosate laden herbicides that will not harm bees (as long as you don't spray it directly on them the bees):

Organic Herbicide Recipe:

1 gallon of 10% (100 grain) vinegar
1 ounce orange oil or d-limonene
1 teaspoon liquid soap or other surfactant
1 tablespoon molasses (optional)

Mix. Shake well before each spraying, and spot spray weeds. Keep away from desirable plants as this will injure any plant it touches. This spray works best on warm to hot days. Vinegar sprayed at the bases of trees and large woody plants will not hurt the plant at all. Avoid all vinegar products made from glacial acetic acid.

You can also use just plain vinegar instead of this recipe, but it works best if it's 20% horticultural vinegar.

If you are interested in learning more about glyphosate, look up "Stephanie Seneff" who is a highly respected authority on the subject. If you have any questions about this article you can email me at: texashoneyqueen2014@gmail.com and I'll try to answer your questions.

The Texas Honey Queen Program Facebook page is doing great

with almost 400 likes, but we can always use more, so don't forget to "like" us if you haven't already. And if you're not following us on Twitter then please do so! Our tag is @TxHoneyQandP. Also, Princess Shannon and I recently came out with a new batch of our Honey Queen Fundraiser Cards that we designed (we debuted them at the TBA Summer Clinic), so if you haven't had the chance to get a set, ask us about them, or you can head over to the TBA website (texasbeekeepers.org) and order a few sets from there. You do get a better deal if you buy them from us in person though!

My Honey Queen schedule is quickly filling up for the fall and Princess Shannon and I have only a little over three months left as your Honey Queen and Princess (time has flown by!), so if you have an event that you would like either of us to come to, contact Honey Queen Chair, Rachael Seida, ASAP. You can reach Rachael at: texashoneyqueenchair@gmail.com or (214) 578-3477.

May you all have a wonderful summer and bountiful honey harvest!

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Extracting Honey in July 2014 at a Commercial Beekeeper's Facilities in Texas

Date	Event	Location	Type	Number of People Reached	Notes
6/5/14	East Texas Beekeepers Mtg.	Whitehouse, TX	Bee Meeting	100+	Attended meeting
6/7/14	Texas Beekeepers Association Summer Clinic	Bryan, TX At the Texas A&M Bee research lab	TBA Event	310	Helped with various things, attended sessions, manned Honey Queen Booth
6/10/14	Trinity Valley Beekeepers Mtg.	Dallas, TX	Bee Meeting	53	Talked on what to do with beeswax & made a beeswax lotion
6/12/14	Marshal Beekeepers Mtg.	Marshal, TX	Bee Meeting	32	Gave power point on neonics and bees
6/11/14	Gladewater Newspaper	Gladewater, TX	Newspaper Article		paragraph announcing my visit to Lee Library
6/18/14	Lee Library Summer Reading Program	Gladewater, TX	Bee Talk	33	Interviewed by Longview News Journal afterwards
6/18/14	Gladewater Lions Club	Gladewater, TX	General Bee Talk	20	Met the Mayor of Gladewater
6/19/14	Longview News Journal	Longview, TX	Newspaper Article	20,000	Big article on bees & my talk at Lee Library
6/19/14	Newsjournal.com	Longview, TX	Online Article		Same as in the paper
6/23/14	Waco-trib.com	Waco, TX	Online Article	20,000	Paragraph announcing my visit to Heart of TX Beekeepers
6/24/14	Marigold Learning Academy	Rockwell, TX	Bee Talk	15	Special-needs school, 2 presentations
6/24/14	Lake Worth ISD Summer Camp	Lake Worth, TX	Bee Talk	108	2 presentations
6/24/14	Heart Of Texas Beekeepers Mtg.	Waco, TX	Bee Meeting	50	Gave power point on neonics and bees
6/25/14	Lake Worth ISD Summer Camp	Lake Worth, TX	Bee Talk	95	3 presentations
6/25/14	Kids R Kids Day-care	Richardson, TX	Bee Talk	107	PreK-4 th Grade
6/28/14	Winnsboro Film & Food Fest	Winnsboro, TX	Booth Work	100-120	Manned booth between showings of "The Last Beekeeper"
7/3/14	Winnsboro News	Winnsboro, TX	Newspaper Article	Still locating	Interviewed @ Film & Food Fest
7/3/14	East Texas Beekeepers Mtg.	Whitehouse, TX	Bee Meeting	81	Gave update on my travels & the HQ Program
7/4/14	Big Sandy 4 th of July Parade	Big Sandy, TX	Parade		Rode in the Parade
7/7/14	The Journal	Big Sandy, Hawkins, TX	Newspaper Article	122,000	Picture of me in the Big Sandy parade.
7/11/14	Waco Tribune	Waco, TX	Newspaper Article	31,000	Picture and paragraph abt. my program at Heart of Texas Bees
7/11/14	Waco-trib.com	Waco, TX	Online Article	20,000	Same article as in the newspaper
7/15/14	All About Bees at the A&M Agrilife Research Center	San Angelo, TX	Intro to bee-keeping talk	110	Gave a program on bee biology, getting started in beekeeping & extracting honey
7/15/14	Concho Valley Beekeepers Mtg.	San Angelo, TX	Bee Meeting	50+	Gave a power point on neonics and bees



2014 Texas Honey Princess Shannon LaGrave

Bee Characteristics

As beekeepers, we are confronted regularly with questions regarding which breeds are best to purchase and about their many personality traits such as; are they disease resistant, productive and gentle? Each breed of bee carries characteristics that are valuable in the survival of the species. Not only do these traits affect our daily lives and beekeeping practices, but also their usefulness to us.

Just as an overview, here are four commonly known species:

- Apis Dorsata: The Giant Honey Bee
- Apis Florea: The Little Honey Bee
- Apis Cerana: The Eastern Honey Bee
- Apis Mellifera: The Western Honey Bee.

All four of these Species share the same number of chromosomes. On the other hand, the species of bees is mostly a product of the natural selection of the area they came from. There is very little scientific breeding that has created types of bees. Therefore, it has been determined that the type is more determined by geography rather than characteristic, as you would classify, say, a cat or cow. Breeding of farm animals or domestic pets is done by selection of traits and long planning.

Bees are classified in research by the size, hair coverage, color, veins of wings, length of tongue, and number of hamuli (hooks) on the wings, metatarsal width and other distinguishing characteristics. The race of a bee refers to the geographic location from where they are found. The commercial side of man's moving bees around the globe even in the ancient times creates the fact that there is not been a "pure" race recovered to our knowledge.

Apis Dorsata lives in an open single Honey Comb. They also live close to one another, for instance grouping these single honey combs in a large tree or on a cliff area. In the comb all the cells are the similar in size though there is a Queen, Drone and Worker bee. This species is found mostly in India and Nepal areas around the Himalayas and is unusual in that the bees will work during the full moon at night to gather the pollen and or nectar available.

The Apis Florea is the smallest of the bees and also uses a single comb that attaches itself to the small twigs of a tree or other small area. An obvious difference from the Apis Dorsata is that Apis Florea has are four distinct sizes of cells in the comb with the largest being for the collection of honey. Their location is mostly southern and south eastern Asia and there are subspecies of the Apis Florea, specifically the red dwarf honey bee and another which is darker. These bees do the waggle dance differently on their comb where they always run toward the food

source in the dance. Other bees do the dance without actually directing the run toward the food source.

Apis Cerana the Eastern Honey Bee is active in lower temperatures and is found in Northern China and East Siberia and ranges from West Afghanistan to Japan. This bee is also adapted to hot climates and there are references to it being used in Australia. Apis Cerana is closely related to Apis Mellifera but has distinct differences. Because of the many similarities it was wondered if they were not a part of the same species. One thing stood out to me; however, the two races do not interbreed. Apis Mellifera produces larger colonies than Apis Cerana.

Apis Mellifera are the type of honey bees utilized in North America and within this species are 28 recognized subspecies. The Apis Mellifera that come from European descent, most predominately are the Italian Queens imported by Charles Dadant. He, as we know the story, was displeased with the performance of the smaller German Black Bee and sought to improve the productivity through another strain of bee.

Yet, we are not able to ensure the genetic purity of the species within Apis Mellifera as they should be allowed to fly out of our control in order to introduce diversity. The Queen will not mate with drones from her own hive because they find the pheromone unattractive. So the existence of drones in a hive is merely to ensure the genetic diversity of other hives. Those hives may not be related to the hives on your property, but, likely, they have contributed to the overall genetic diversity of your bee yard.

The desire to control the breeding aspect of beekeeping in the creating of drone islands whether in a figurative or literal sense. In order to create the best possible queen breeding opportunities small colonies on islands will afford the control of the drones in the breeding process. This is one option for success in the science of improving the genetic strain in a hive.

There is work ongoing in commercial operation to build the genetic diversity by changing queen supplier each year in an effort to build resistance to genetically related issues, whether it is mites or some other genetic weakness.

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Texas Honey Queen Chair Rachael Seida

Dear Texas Beekeepers,

It is always exciting for us when a club crowns a new Honey Queen or Princess, but it is probably three times as exciting when it is their first Honey Queen ever! Congratulations to Central Texas Beekeepers Association on the successful start of their Honey Queen Program! The blessed club has found a wonderful young lady, Caroline Boozer, to represent them this year and we very much look forward to welcoming her to upcoming TBA events!

As always – check the Facebook page for updates our promotions this year. Also, the girls post fun facts and information 4-5 times a week on our Twitter page!

We still have some open spots this fall and would love to send our Queen and Princess out to promote around the state!

To host the Honey Queen or Princess is very easy: You need an event or events to invite her to promote at (Fair/ Festival, Media, Schools, Civic Groups, etc.) and a host family (or single woman). My contact info is below if you have an event in mind, or more questions.

Since the TBA Convention, I had several persons (locally and nationally) inquire about starting a honey queen program in their club/association. This inspired me to take up, as a goal for 2014, a desire I have had for several years of writing a manual for starting and running a honey queen program. My progress in writing took a great jump since my last article and I am pleased to say that an initial rough draft is being reviewed! I am so excited at the prospect of being able to help promote the program this way!

We look forward to seeing all of you soon.

Rachael Seida, texashoneyqueenchair@gmail.com
(214) 578-3477

Like us on Facebook - Texas Honey Queen Program
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Visit our new website at www.texasbeekeepers.org

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*Register for the 2014 Annual Convention.
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Look for the Honey Locator and Events Calendar

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Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

Membership category:	Century Club	\$100	_____
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	Association	\$ 50	_____

Donation:	Honey Bee Research Fund	_____
	Texas Honey Queen Fund	_____
	Legislative Fund	_____
	State Fair Honey Booth Fund	_____

Total Enclosed _____

Remit to: Shirley Doggett
Membership Coordinator, 400 County Road 440, Thrall, TX 76578



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Kevin Rader: krader@beekeepingins.com

Noel Epstein: nepstein@beekeepingins.com

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Listing of Local Beekeepers' Associations in Texas with TBA Delegate and Regular Meeting Information Shown for Each

Please forward any changes and/or additions to
John J. Talbert, Executive Secretary, john@sabinecreekhoney.com

Alamo Area Beekeepers Association

Edward Priest - (210) 722-7380
edward_p@sbcglobal.net
9570 Maidenstone - San Antonio, TX 78250
Meetings: 3rd Tuesday on odd # months; at
Helotes Ind. Baptist Church
15335 Bandera Rd., Helotes @ 7 pm

Austin Area Beekeepers Association

Lance Wilson - (512) 619-3700
lw@ausapts.com
8701 North Mopac Expressway #150, Austin TX 78759
www.meetup.com/Austin-Urban-Beekeeping/
Meeting: 3rd Monday of each month
Old Quarry Library, 7051 Village Center Dr., Austin TX 78731 @ 7pm

Brazoria County Beekeepers Association

Larry Hoehne - (979) 848-8780 or (979) 236-1385
233 Crestwood, Clute TX 77531
bcbassociation@gmail.com
www.brazoria-county-beekeepers-association.com
Meetings: 2nd Monday of each month at 7pm;
Brazoria County Extension Office
21017 County Road 171, Angleton TX 77515

Caddo Trace Beekeepers Association

Roger Farr - (979) 436-5310
6073 Farm Road 2348, Mount Pleasant, TX 75455
rdfarr@gmail.com
Meetings: 2nd Monday of each month at 7pm
Titus County Agrilife Extension Bldg, 1708 Industrial Rd.,
Mount Pleasant, TX 75455

Central Texas Beekeepers Association

Michael Kelling - (979) 277-0411
CentralTexasBeekeepers@gmail.com
www.centraltexasbeekeepers.org
1997 Tonckawa Hills Ln - Brenham, TX 77833
Meetings: Monthly on the 4th Thursday
(except November and December) at the
Washington County Fairgrounds
Brenham @ 7 pm

Coastal Bend Beekeepers Association

Pete Hartje - (361) 229-0512
phartje@juno.com
1330 Whispering Sands, Port Aransas, TX 78373
Meetings: First Thursday of each month at 6:30pm;
City of Corpus Garden Senior Center
5325 Greely Dr., Corpus Christi, TX 78412

Collin County Hobby Beekeepers Assn.

John J. Talbert - (214) 532-9241
john@sabinecreekhoney.com
P O Box 6 - Josephine, TX 75164
www.cchba.org
Meetings: 2nd Monday of each month;
Heard Craig Hall, 306 N. Church St,
McKinney @ 6:30 pm

Concho Valley Beekeepers Association

Mark F Hedley - (325) 463-5319
8247 FM 502, Rochelle, TX 76872
mark@spiralhornapiary.com
Meetings: 3rd Tuesday of each month Jan-Nov
Texas A&M Research and Extension Center
7887 US Hwy 87 N, San Angelo @ 7:30 pm

Dino-Beekeepers Association

Lee Burough - (817) 964-0238
dino-beeclub@hotmail.com
www.dinobee.com
Meetings: 2nd Tuesday of month
Glen Rose Citizens Center
209 SW Barnard St, Glen Rose, TX 76043

East Texas Beekeepers Association

Richard Counts - (903) 566-6789
dickcounts@bigplanet.com
16239 Audrey Lane - Arp, TX 75750
www.etba.info
Meetings: 1st Thursday of each month;
Whitehouse United Methodist Church,
405 West Main (Hwy 346), Whitehouse @ 6:45 pm

Fayette County Beekeepers Association

Karolyn Mau - (979) 733-4022
k2isqueenbee@gmail.com
Meetings: First Saturday of the month, Feb, April,
June, August, October and December
Fayette County Agriculture Building
240 Svoboda Lane, La Grange, TX 78945

Fort Bend Beekeepers Association

1402 Band Road, Rosenberg, TX 77471
(281) 633-7029 (during office hours)
Jeff McMullan - Secretary - Treasurer
(281) 980-2363 (home): (281) 615-5346 (cell)
jeffmcmullan@comcast.net
Meetings: 2nd Tuesday of each month (except
December) in the Fort Bend County
Bud O'Shieles Community Center
1330 Band Road, Rosenberg, TX 77471

Harris County Beekeepers Association

Cameron Crane - (409) 658-3800
info@harriscountybeekeepers.org
2300 Belvedere Dr., Baytown, TX 77520
www.harriscountybeekeepers.org
Meetings: 4th Tuesday of each month
Golden Acres Center - 5001 Oak Avenue
Pasadena @ 7 pm

Heart of Texas Beekeepers Association

Gary Bowles - (254) 214-4514
gbowles@peoplepc.com
Meetings: 4th Tuesday of each month
(except December) at A1 Buffet,
301 S. Valley Mills Drive, Waco @ 6:30 pm

Local Beekeepers' Associations in Texas

Houston Beekeepers Association

Rita Willhite - (832) 654-7317

rr.willhite@yahoo.com

7806 Braeburn Valley Dr. - Houston, TX 77074

www.houstonbeekeepers.org

Meetings: 3rd Tuesday of each month; Bayland Community Center, 6400 Bissonnet St. Houston @ 7:30 pm

Liberty County Beekeepers Association

Cameron Crane - (409) 658-3800

info@libertycountybeekeepers.org

2300 Beveledere Dr., Baytown, TX 77520

www.libertycountybeekeepers.org

Meetings: 1st Tuesday of each month at 7pm
Business meeting at 6:30pm
Liberty Agrilife Extension Office
501 Palmer Avenue, Liberty TX

Marshall Beekeeping Association

Beth Derr - (936) 591-2399

derrbe@netscape.net

210 Meadowlark Dr. Jefferson, TX 75657

Meetings: 2nd Thursday of each month at 5:30 pm
Centrall Marshall Fire Station
601 S Grove St., Marshall, TX 75670

Metro Beekeepers Association

Roger Evarrt, President

evarttrog@yahoo.com

www.metrobeekeepers.net

344 NW King St., Burleson, TX 76028

Meetings: 2nd Monday of each month; Cana Baptist Church,
2309 East Renfro St. TX 76028 @ 6:30 pm

Montgomery County Beekeepers Assn.

John Hicks - (936) 756-9708

johnhicks12003@yahoo.com

www.mocobees.com

Meetings: 3rd Monday of each month at
Montgomery County Extension Office @ 7 pm

Northeast Texas Beekeepers Association

J.B. (Jim) Lathem - (903) 896-7100

netba1@aol.com

PO Box 777, Wills Point, TX 75169

Meetings: 2nd Tuesday of each month; @ 6:45 pm
Russell Memorial United Methodist Church
Deen Building, Classroom 2
201 South 4th Street (Farm Road 47), Wills Point, TX 75169

Pineywoods Beekeepers Association

Terry McFall - (409) 384-3626

tdmcfall@hotmail.com

1700 FM 252, Jasper, TX 75951

Meetings: 2nd Thursday of each month
Chamber of Commerce Building,
1615 S Chestnut, Lufkin @ 7:00 pm

Red River Valley Beekeepers Assn.

Doug Hill

1701 Fairfax

Wichita Falls, TX 76301

Meetings: 3rd Tuesday of each month
(except December) Bolin Science Hall, Room 209
Midwestern St. University
Wichita Falls @ 7 pm

Rio Grande Valley Beekeepers Assn.

Billy Wright - (956) 464-5042

Route 5, Box 74 - Donna, TX 78537

Meetings: 3rd Tuesday of each month;
TAMU Res. and Ext. Center, 2401 E. Highway 83
Weslaco @ 7:30 pm

Travis County Beekeepers Assn.

Tanya Phillips - (512) 560-3732

info@traviscountybeekeepers.org

9874 Wier Loop Circle, Austin, TX 78736

www.traviscountybeekeepers.org

Meetings: Last Tuesday of the month at 7pm
Twin Oaks Library, 1800 S 5th St., Austin, TX 78704

Trinity Valley Beekeepers Association

Alan Eynon - (972) 231-5702, Ext. 104

abees@swbell.net

9702 Vinewood Drive - Dallas, TX 75228

www.tvbees.org

Meetings: 2nd Tuesday of each month
(except August), Continuing Education Center,
C.C.Young Facility, 4847 West Lawther Dr.,
Dallas, TX 75214 @ 7 - 9 pm

Walker County Area Beekeepers Assn.

Steve Kelley - (936) 435-2426

shortmd@msn.com

102 Tam Road, Huntsville, TX 77320

Meetings: Last Thursday of each month
at Walker County Extension Office, #1 Tam Rd.
Huntsville @ 7 pm

Williamson County Area Beekeepers Assn.

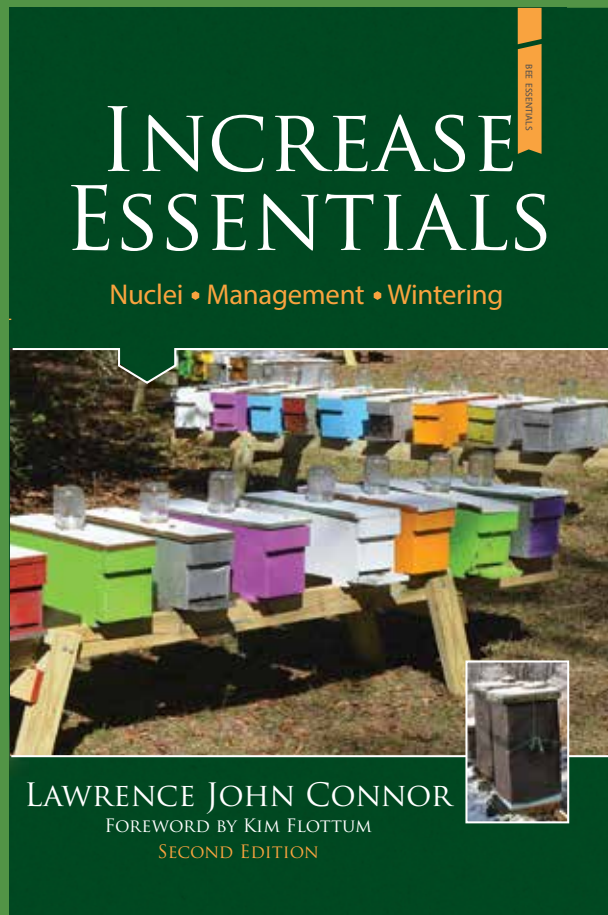
Jimmie Oakley - (512) 388-3630

jimmie.oakley@gmail.com - *www.wcaba.org*

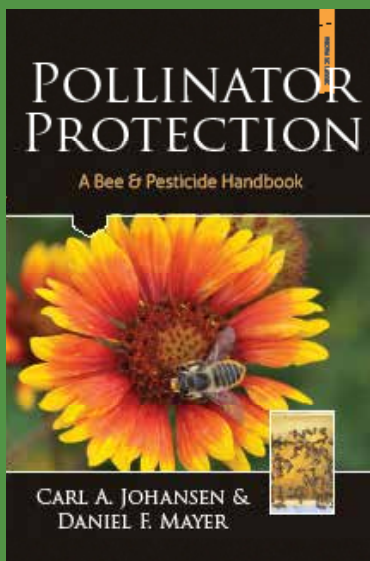
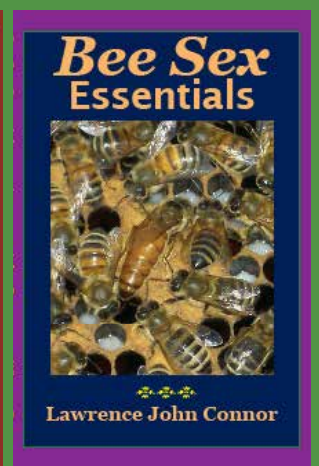
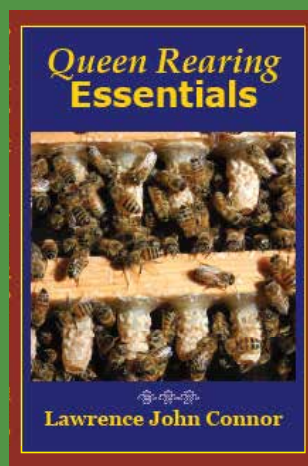
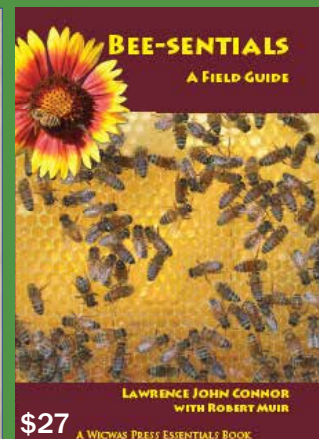
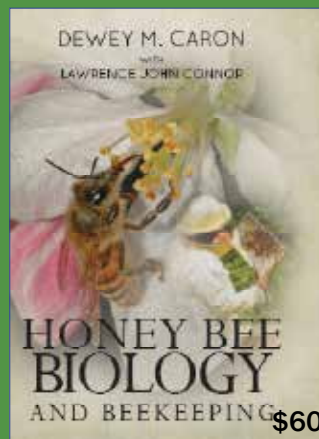
425 Sapphire Lane, Jarrell, TX 76537

Meetings: 4th Thursday of each month
(except December) 1st United Methodist Church -
McKinney Ministry Center, 410 E University Ave.
Georgetown, TX 78626 @ 7 pm

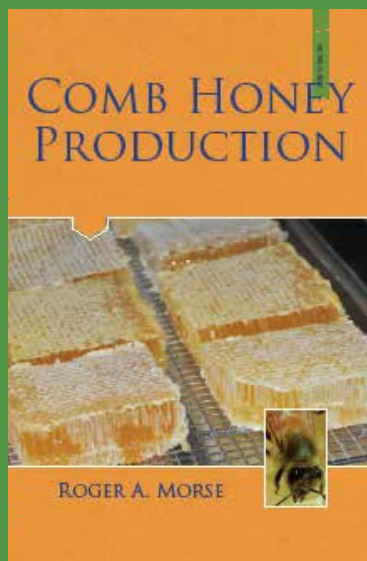
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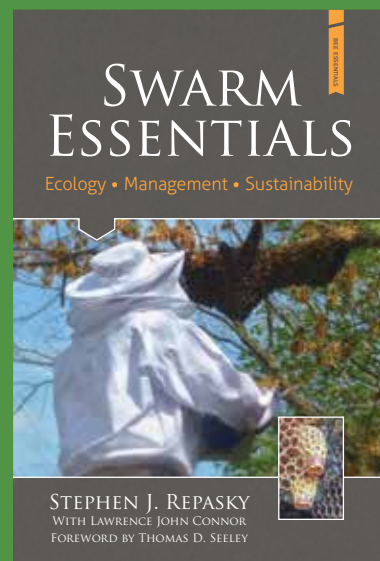
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